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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,858	01/11/2006	Jong-Hun Han	7693P001	5118
8791 7590 05/16/2008 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER	
			YOO, REGINA M	
SUNN I VALE, CA 94085-4040			ART UNIT	PAPER NUMBER
			1797	
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			05/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Comments	10/564,858	HAN, JONG-HUN			
Office Action Summary	Examiner	Art Unit			
	REGINA YOO	1797			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on					
	-· action is non-final.				
<i>;</i> —	_				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
ologod in addordance with the practice and c	x parte quayre, 1000 C.D. 11, 10	.0 0.0. 210.			
Disposition of Claims					
4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6) Claim(s) <u>1-13</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examiner	-				
10)⊠ The drawing(s) filed on <u>11 January 2006</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 					
2. Certified copies of the priority documents		on No			
3. Copies of the certified copies of the prior	• • • • • • • • • • • • • • • • • • • •				
	*	d III tilis National Stage			
	application from the International Bureau (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application					
Paper No(s)/Mail Date <u>1/11/2006</u> . 6) Other:					

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DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 71, 72. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 6 and 7 are objected to because of the following informalities: line 4 "he" appears to be misspelled form of word "the". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 4. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, Claim 1 states that the cartridge is installed to a lower portion of the main plug body while the figures and Specification indicates that the cartridge is installed on the rotating member.
- 5. Claim 2 recites the limitation "the connector" in line 6. There is insufficient antecedent basis for this limitation in the claim.
- 6. Claim 2 recites the limitation "the auxiliary cigar-jack" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.
- 7. Claims 6 and 7 recite the limitation "the auxiliary cigar-jack" in line 6. There is insufficient antecedent basis for this limitation in the claim.
- 8. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the acronym "PTC" is not clearly defined.
- 9. Claims 10 and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the acronym "PCB" is not clearly defined.

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Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 11. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 12. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura (WO 03/066113 where U.S. Pat. Application. No. 20040258578 is the English equivalent) in view of Chou (20030082930), Wefler (20050271371 in view of Provisional application No. 60/577,212) and Weick (4940272).

As to Claim 1, Takemura ('578) discloses an aroma emitting apparatus (1) for using a cigar-jack characterized by:

a main plug body (11) having one end formed with a road portion (22) inserted to the cigar-jack for electrical connection, and a plurality of plates (31) oppositely installed to an outer circumference of the main plug body (11) for being fixed to the cigar-jack (see entire document, particularly Figures 1-3);

a rotating member (12) connected to an end of the main plug body (11), and rotated in accordance with an angle of inserting the main plug body (11) into the cigarjack to maintain a horizontal state;

a cartridge (52) installed to a lower portion of the rotating member (12), angle adjusting means (91-94, 101, 111-112) for connecting the main plug body (11) to the rotating member (12) and controlling a rotating angle (see entire document, particularly Figures 3-4);

a fragrance exhaust (81);

switching means (41, 43, 45) mounted within the rotating member (12) for performing an ON/OFF operation to electrically connect to the road portion (22);

heating means (71) internally formed within the rotating member (12) and selectively supplied with a power source in accordance with the ON/OFF operation of the switching means (45) for thereby being heated to evaporate liquid within the cartridge (52) (see Figures 1-4 and p.2 paragraph [0034]), and

holding means (55, 61, 62) having one end with a fixing portion (61) coupled to the rotating member (12) or the cartridge (52), and the other end with a gripping portion (62) for firmly holding a predetermined frame (see entire document, particularly Figures 3 and 5).

Takemura ('578) does not appear to specifically teach that the aroma emitting apparatus is comprised of:

an auxiliary plug body capable of adjusting a length of the main plug body by using a length control bolt;

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the cartridge having a filter externally protruding from the inside the cartridge; or open/close means mounted within the rotating member for controlling open/closing of the fragrance exhaust.

As to the limitation that an aroma emitting apparatus is comprised of an auxiliary plug body capable of adjusting a length of the main plug body by using a length control bolt, it was known in the art at the time of invention to provide a length adjusting means to an apparatus utilizing a cigar-jack. Chou ('930) discloses an apparatus (see Figures 3 and 5-6) comprised of:

a main plug body (41) having one end formed with a road portion inserted to the cigar-jack for electrical connection, and a plurality of plates oppositely installed to an outer circumference of the main plug body for being fixed to the cigar-jack (see Figure 3); and

an auxiliary plug body (43, 44),

in order to adjust a length of the main plug body (41) so as to be able to provide power to an electrical appliance connected to the main plug body without any additional adapter in various kinds of vehicles (see entire document, particularly p.1 paragraphs [0001]-[0003] and [0007]-[0008]).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide an auxiliary plug body in the apparatus of Takemura in order to provide the capability of length adjustment between the main plug body and the electrical appliance connected to the main plug body through the auxiliary plug body so

that such assembly will fit in any type of vehicle (as different types of vehicle will have different dimension/location of the cigar-jack) as shown by Chou.

As to the limitation that a length control bolt is utilized with the auxiliary plug body, while Chou ('930) discloses various length control means (such as 451, 452 in 421 or 521 or 621), Chou ('930) does not specifically teach that the length control means include the means in the form of a bolt. However, it would have been well within the purview of one of ordinary skill in the art to substitute the length control means such as 451 and 452 with a bolt in order to maintain the auxiliary plug body at a desired position, as a bolt is a known means for holding various components in a desired location. Only the expected results would be attained.

As to the limitation that the cartridge having a filter externally protruding from the inside the cartridge, it was well known in the art at the time of invention to release an aromatic material from a cartridge through a filter material externally protruding from the inside the cartridge. Wefler ('371) exemplifies an automobile air freshening system (1) for using a cigar-jack characterized by:

a main plug body (9) having one end formed with a road portion inserted to the cigar-jack for electrical connection, and a plurality of plates (10) oppositely installed to an outer circumference of the main plug body (9) for being fixed to the cigar-jack (see Figure 2-4);

a rotating member (2, 14) connected to an end of the main plug body (9), and rotated in accordance with an angle of inserting the main plug body (9) into the cigarjack to maintain a horizontal state;

a cartridge (11) installed to a lower portion of the rotating member (2) and having a filter (56) externally protruding from the inside the cartridge (11) (see Figures 1 and 4),

in order to deliver the liquid aromatic material to the aroma emission means (see Figure 1 and p.3 paragraphs [0035]-[0036]).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide a filter externally protruding from the inside the cartridge in the apparatus of Takemura in order to provide a closer contact between the aromatic material delivery point and the emission means (such as heating means) as exemplified by Wefler.

As to the limitation that the aroma emitting apparatus is comprised of open/close means mounted within the rotating member for controlling opening/closing of the fragrance exhaust, it was well known in the art at the time of invention to provide such means in an aroma emitting apparatus. Weick ('272) exemplifies an aromatic emitting device (see Figures 1-3) characterized by open/close means (5d) mounted within a rotating member (5) for controlling opening/closing of a fragrance exhaust (5a) in order to adjust the amount of evaporated aromatic material that is emitted from the apparatus (see entire document, particularly Col. 2 lines 42-55).

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It would have been obvious to one of ordinary skill in this art at the time of invention to provide open/close means with the fragrance exhaust opening in the apparatus of Takemura in order to control the amount of aromatic material that is being exhausted from the apparatus as exemplified by Weick.

As to Claim 3, Takemura ('578) discloses that the angle adjusting means is characterized by a tension rib formed along an end surface of the main plug body, and an indent portion formed along an end surface of the rotating member corresponding to a projecting portion of the tension rib (see p.3 [0038])

As to Claim 4, Takemura ('578) discloses that the angle adjusting means is characterized by a bendable folding shape (see Figure 4).

As to Claim 5, Takemura ('578) appears to only disclose the structure in claim 3 that is opposite orientation of that claimed in claim 5. However, it would have been well within the purview of one of ordinary skill in the art to provide the structure that is opposite of that disclosed in paragraph [0038] in page 3 as an alternate configuration to adjust the angle. Only the expected results would be attained. (Also see MPEP § 2144.04 section VI. A).

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Thus, Claims 1 and 3-5 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Takemura ('578), Chou ('930), Wefler ('371) and Weick ('272).

- 13. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.
- 14. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura (WO 03/066113 where U.S. Pat. Application. No. 20040258578 is English equivalent) in view of Chou (20030082930), Wefler (20050271371 in view of Provisional application No. 60/577,212) and Weick (4940272) as applied to claim 1 above, and further in view of Whitby (20020159916).

Takemura ('578), Chou ('930), Wefler ('371) and Weick ('272) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

While Takemura ('578) discloses heating means (71) and a light emitting diode (42) for displaying the supply of the power source (see p.2 [0031]), Takemura ('578) does not appear to specifically teach that the heating means is characterized by:

a printed circuit board installed within the rotating member for supplying the power source in accordance with the ON/OFF operation of the switching means, and having a connector for supplying the power source; and

a PTC device installed on the printed circuit board for evaporating liquid permeating in the filter of the cartridge.

It was well known in the art at the time of invention to provide a heating means comprised of a printed circuit board and a PTC device installed thereon. Whitby ('916) exemplifies an aroma emitting apparatus (see Figures 1-3) characterized by a heating means comprised of a printed circuit board (5) installed within the apparatus for supplying the power source in accordance with the ON/OFF operation of a switching means (7), and having a connector (6a) for supplying the power source (see entire document, particularly Figures and p.2 [0021]); and

a PTC device installed on the printed circuit board (5) for evaporating liquid permeating in the filter (8a, 8b) of the cartridge (2a, 2b) (see entire document, particularly p.2 [0017]),

in order to evaporate the liquid aromatic material for emission into the atmosphere (see entire document, particularly p.1 [0006]).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide a printed circuit board with a PTC device in the heating means of Takemura in order to evaporate the aromatic material for emission into the air as exemplified by Whitby.

Thus, Claim 6 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Takemura ('578), Chou ('930), Wefler ('371), Weick ('272) and Whitby ('916).

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15. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura (WO 03/066113 where U.S. Pat. Application. No. 20040258578 is English equivalent) in view of Chou (20030082930), Wefler (20050271371 in view of Provisional application No. 60/577,212) and Weick (4940272) as applied to claim 1 above, and further in view of Whitby (20020159916) and Sundberg (6141496).

Takemura ('578), Chou ('930), Wefler ('371) and Weick ('272) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

While Takemura ('578) discloses heating means (71) and a light emitting diode (42) for displaying the supply of the power source (see p.2 [0031]), Takemura ('578) does not appear to specifically teach that the heating means is characterized by:

a printed circuit board installed within the rotating member for supplying the power source in accordance with the ON/OFF operation of the switching means, and having a connector for supplying the power source; and

a plurality of stripe resistors installed on the printed circuit board for evaporating liquid permeating in the filter of the cartridge.

It was well known in the art at the time of invention to provide a heating means comprised of a printed circuit board and a plurality of stripe resistors installed thereon. Whitby ('916) exemplifies an aroma emitting apparatus (see Figures 1-3) characterized by a heating means comprised of a printed circuit board (5) installed within the apparatus for supplying the power source in accordance with the ON/OFF operation of a switching means (7), and having a connector (6a) for supplying the power source (see entire document, particularly Figures and p.2 [0021]); and

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a resistance-based heating device installed on the printed circuit board (5) for evaporating liquid permeating in the filter (8a, 8b) of the cartridge (2a, 2b) (see entire document, particularly p.2 [0017]),

in order to evaporate the liquid aromatic material for emission into the atmosphere (see entire document, particularly p.1 [0006]).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide a printed circuit board with a resistance-based heating device in the heating means of Takemura in order to evaporate the aromatic material for emission into the air as exemplified by Whitby.

As to the limitation that the resistance-based heating means is comprised of a plurality of stripe resistors, it was well known in the art at the time of invention to provide a plurality of stripe resistors as a heating device. Sundberg ('496) exemplifies an aroma emitting device (10) where a plurality of stripe resistors (41, 42) are utilized in order to generate heat for volatilizing the aromatic material (see entire document, particularly Col. 3 lines 36-44). It would have been obvious to one of ordinary skill in this art at the time of invention to provide a plurality of stripe resistors as the resistance-based heating device in the apparatus of Takemura as modified by Whitby in order to volatilize the aromatic material as exemplified by Sundberg.

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Thus, Claim 7 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Takemura ('578), Chou ('930), Wefler ('371), Weick ('272), Whitby ('916) and Sundberg ('496).

16. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura (WO 03/066113 where U.S. Pat. Application. No. 20040258578 is English equivalent) in view of Chou (20030082930), Wefler (20050271371 in view of Provisional application No. 60/577,212) and Weick (4940272) as applied to claim 1 above, and further in view of Cartigny (WO 03/075724 where 20050166908 is the English equivalent).

Takemura ('578), Chou ('930), Wefler ('371) and Weick ('272) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

While Weick ('272) discloses an aromatic emitting device with open/close means (5d), Weick ('272) does not appear to specifically teach that the open/close means is characterized by:

an open/close member of the fragrance exhaust installed within the rotating member and having one side with a rack structure;

a pinion coupled to the rack of the open/close member; and an operative knob connected to a central shaft of the pinion for operating the open/close member.

It was well known in the art at the time of invention to provide an open/close means characterized by a pinion coupled to a rack and an operative knob connected to

a central shaft of the pinion. Cartigny ('578) exemplifies an apparatus wherein the open/close means is characterized by:

an open/close member (7) and having one side with a rack structure (18); a pinion (19) coupled to the rack (18) of the open/close member (7); and an operative knob (6) connected to the rack (18) for operating the open/close member.

in order to turn a component to open/close a structure (see entire document, particularly p.3 [0056]-[0057]).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide a pinion coupled to a rack and an operative knob in the open/close means of Takemura as modified by Weick as an alternate configuration of open/close means in order to open/close an opening as exemplified by Cartigny.

As to the limitation that the operative knob is connected to a central shaft of the pinion, it would have been well within the purview of one of ordinary skill in the art to provide a knob linked to the central shaft of the pinion in the open/close means of Takemura as modified by Cartigny as a known alternate means to actuate a pinion/rack assembly in order to operate the open/close means. Only the expected results would be attained.

Thus, Claim 8 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Takemura ('578), Chou ('930), Wefler ('371), Weick ('272) and Cartigny ('908).

17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura (WO 03/066113 where U.S. Pat. Application. No. 20040258578 is English equivalent) in view of Chou (20030082930), Wefler (20050271371 in view of Provisional application No. 60/577,212) and Weick (4940272) as applied to claim 1 above, and further in view of Stumphauzer (5460846).

Takemura ('578), Chou ('930), Wefler ('371) and Weick ('272) are relied upon for disclosure described in the rejection of claim 1 under 35 U.S.C. 103(a).

While Weick ('272) discloses an aromatic emitting device with open/close means (5d), Weick ('272) does not appear to specifically teach that the open/close means is characterized by:

an open/close member installed within the rotating member and having at least one rib as a stopper at one side surface;

an eccentric cam with an operating distance adjustable by a combination with the rib as a stopper of the open/close member; and

an operative knob connected to a rotating shaft of the eccentric cam for operating the open/close member.

It was well known in the art at the time of invention to provide components such as an eccentric cam having at least one rib as a stopper at one side surface, being adjustable by a combination with the rib, and an operative knob connected to a rotating shaft of the eccentric cam in an open/close means. Stumphauzer ('846) exemplifies an open/close means comprised of:

an open/close member installed within the rotating member and having at least one rib (ridge on upper end of the actuator rod 62, 88/90) as a stopper at one side surface;

an eccentric cam (84) with an operating distance adjustable by a combination with the rib as a stopper of the open/close member; and

an operative knob (86) connected to a rotating shaft (82) of the eccentric cam (84) for operating the open/close member,

in order to maintain a body/lid at a desired position (open/close) so that it remains at that specific orientation for required/desired duration (see entire document, particularly Col. 5 lines 8-33).

It would have been obvious to one of ordinary skill in this art at the time of invention to provide an eccentric cam having at least one rib as a stopper at one side surface, being adjustable by a combination with the rib, and an operative knob connected to a rotating shaft of the eccentric cam in the open/close means of Takemura as modified by Weick as an alternate configuration of open/close means in order to open/close an opening as exemplified by Stumphauzer.

Thus, Claim 9 would have been obvious within the meaning of 35 U.S.C. 103(a) over the combined teachings of Takemura ('578), Chou ('930), Wefler ('371), Weick ('272) and Stumphauzer ('846)..

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REGINA YOO whose telephone number is (571)272-6690. The examiner can normally be reached on Monday-Friday, 10:00 am - 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth L McKane/ Primary Examiner, Art Unit 1797